

PLUS Search Results for S/N 10642933, Searched January 27, 2006

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

6462469  
6617609  
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10642933\_CLS1.txt  
Most Frequently Occurring Classifications of Patents Returned  
From A Search of 10642933 on January 27, 2006

Original Classifications

5 313/504  
3 313/506  
3 428/690  
3 438/22  
2 313/479  
2 313/503  
2 315/169.3  
2 438/701

Cross-Reference Classifications

11 313/504  
6 428/917  
5 257/40  
4 438/99  
3 136/263  
3 313/505  
3 313/506  
3 428/690  
2 136/252  
2 257/461  
2 257/99  
2 257/E21.008  
2 257/E21.027  
2 257/E21.232  
2 257/E21.257  
2 257/E21.314  
2 257/E51.017  
2 438/82  
2 445/24  
2 528/377

Combined Classifications

16 313/504  
6 257/40  
6 313/506  
6 428/690  
6 428/917  
4 438/99  
3 136/263  
3 313/503  
3 313/505  
3 438/22  
2 136/252  
2 136/256  
2 252/62.2  
2 257/461  
2 257/99  
2 257/E21.008  
2 257/E21.027  
2 257/E21.232  
2 257/E21.257  
2 257/E21.314  
2 257/E51.017  
2 313/479  
2 313/512  
2 315/169.3  
2 359/270  
2 428/209

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2 438/701  
2 438/82  
2 445/24  
2 528/377

Titles of Most Frequently Occurring Classifications of Patents Returned  
From A Search of 10642933 on January 27, 2006

16	313/504	(5 OR, 11 XR)
	Class 313 :	ELECTRIC LAMP AND DISCHARGE DEVICES
	313/483	WITH LUMINESCENT SOLID OR LIQUID MATERIAL
	313/498	.Solid-state type
	313/503	..With particular phosphor or electrode material
	313/504	...Organic phosphor
6	257/40	(1 OR, 5 XR)
	Class 257 :	ACTIVE SOLID-STATE DEVICES
	257/40	ORGANIC SEMICONDUCTOR MATERIAL
6	313/506	(3 OR, 3 XR)
	Class 313 :	ELECTRIC LAMP AND DISCHARGE DEVICES
	313/483	WITH LUMINESCENT SOLID OR LIQUID MATERIAL
	313/498	.Solid-state type
	313/506	..Plural layers
6	428/690	(3 OR, 3 XR)
	Class 428 :	STOCK MATERIAL OR MISCELLANEOUS ARTICLES
	428/411.1	COMPOSITE (NONSTRUCTURAL LAMINATE)
	428/688	.Of inorganic material
	428/689	..Metal-compound-containing layer
	428/690	...Fluorescent, phosphorescent, or luminescent layer
6	428/917	(0 OR, 6 XR)
	Class 428 :	STOCK MATERIAL OR MISCELLANEOUS ARTICLES
	428/917	ELECTROLUMINESCENT
4	438/99	(0 OR, 4 XR)
	Class 438 :	SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS
	438/99	HAVING ORGANIC SEMICONDUCTIVE COMPONENT
3	136/263	(0 OR, 3 XR)
	Class 136 :	BATTERIES: THERMOELECTRIC AND PHOTOELECTRIC
	136/243	PHOTOELECTRIC
	136/252	.Cells
	136/263	..Organic active material containing
3	313/503	(2 OR, 1 XR)
	Class 313 :	ELECTRIC LAMP AND DISCHARGE DEVICES
	313/483	WITH LUMINESCENT SOLID OR LIQUID MATERIAL
	313/498	.Solid-state type
	313/503	..With particular phosphor or electrode material
3	313/505	(0 OR, 3 XR)
	Class 313 :	ELECTRIC LAMP AND DISCHARGE DEVICES
	313/483	WITH LUMINESCENT SOLID OR LIQUID MATERIAL
	313/498	.Solid-state type
	313/505	..With electrode matrix
3	438/22	(3 OR, 0 XR)
	Class 438 :	SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS
	438/22	MAKING DEVICE OR CIRCUIT EMISSIVE OF

10642933\_CLSTITLES1.txt  
NONELECTRICAL SIGNAL

- 2 136/252 (0 OR, 2 XR)  
Class 136 : BATTERIES: THERMOELECTRIC AND PHOTOELECTRIC  
136/243 PHOTOELECTRIC  
136/252 .Cells
- 2 136/256 (1 OR, 1 XR)  
Class 136 : BATTERIES: THERMOELECTRIC AND PHOTOELECTRIC  
136/243 PHOTOELECTRIC  
136/252 .Cells  
136/256 ..Contact, coating, or surface geometry
- 2 252/62.2 (1 OR, 1 XR)  
Class 252 : COMPOSITIONS  
252/62.2 ELECTROLYTES FOR ELECTRICAL DEVICES (E.G.,  
RECTIFIER, CONDENSER)
- 2 257/461 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/414 RESPONSIVE TO NON-ELECTRICAL SIGNAL (E.G.,  
CHEMICAL, STRESS, LIGHT, OR MAGNETIC FIELD SENSORS)  
257/428 .Electromagnetic or particle radiation  
257/431 ..Light  
257/461 ...Light responsive pn junction
- 2 257/99 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/79 INCOHERENT LIGHT EMITTER STRUCTURE  
257/99 .With housing or contact structure
- 2 257/E21.008 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE  
OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE DEVICES  
OR OF PARTS THEREOF (EPO)  
257/E21.002 .Manufacture or treatment of semiconductor  
device (EPO)  
257/E21.003 ..Manufacture of two-terminal component for  
integrated circuit (EPO)  
257/E21.008 ...Of capacitor (EPO)
- 2 257/E21.027 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE  
OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE DEVICES  
OR OF PARTS THEREOF (EPO)  
257/E21.002 .Manufacture or treatment of semiconductor  
device (EPO)  
257/E21.023 ..Making mask on semiconductor body for  
further photolithographic processing (EPO)  
257/E21.024 ...Comprising organic layer (EPO)  
257/E21.026 ....Characterized by treatment of photoresist  
layer (EPO)  
257/E21.027 .....Photolithographic process (EPO)
- 2 257/E21.232 (0 OR, 2 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE

## OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE

DEVICES OR OF

PARTS THEREOF (EPO)

257/E21.002 .Manufacture or treatment of semiconductor device (EPO)

257/E21.04 ..Device having at least one potential-jump barrier or surface barrier, e.g., PN junction,

depletion

257/E21.085 ...Device having semiconductor body comprising layer, carrier concentration layer (EPO)

without 257/E21.085 ...Device having semiconductor body comprising Group IV elements or Group III-V compounds with or

257/E21.211 ....Treatment of semiconductor body using impurities, e.g., doping materials (EPO)

material on 257/E21.211 ....Treatment of semiconductor body using process other than deposition of semiconductor

material, or a substrate, diffusion or alloying of impurity

257/E21.214 .....To change their surface-physical radiation treatment (EPO)

cutting 257/E21.214 .....To change their surface-physical characteristics or shape, e.g., etching, polishing,

257/E21.215 .....Chemical or electrical treatment, e.g., (EPO)

257/E21.231 .....Using mask (EPO)

257/E21.232 .....Characterized by their composition, e.g., multilayer masks, materials (EPO)

2 257/E21.257 (0 OR, 2 XR)

Class 257 : ACTIVE SOLID-STATE DEVICES

257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE

OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE

DEVICES OR OF

PARTS THEREOF (EPO)

257/E21.002 .Manufacture or treatment of semiconductor device (EPO)

257/E21.04 ..Device having at least one potential-jump barrier or surface barrier, e.g., PN junction,

depletion

257/E21.085 ...Device having semiconductor body comprising layer, carrier concentration layer (EPO)

without 257/E21.085 ...Device having semiconductor body comprising Group IV elements or Group III-V compounds with or

257/E21.211 ....Treatment of semiconductor body using impurities, e.g., doping materials (EPO)

material on 257/E21.211 ....Treatment of semiconductor body using process other than deposition of semiconductor

material, or a substrate, diffusion or alloying of impurity

257/E21.214 .....To change their surface-physical radiation treatment (EPO)

cutting 257/E21.214 .....To change their surface-physical characteristics or shape, e.g., etching, polishing,

257/E21.24 .....To form insulating layer thereon, e.g., (EPO)  
for masking or by using photolithographic technique

257/E21.241 .....Post-treatment (EPO)

257/E21.249 .....Etching insulating layer by chemical or physical means (EPO)

257/E21.257 .....Using mask (EPO)

- 2 257/E21.314 (0 OR, 2 XR)  
 Class 257 : ACTIVE SOLID-STATE DEVICES  
 257/E21.001 PROCESSES OR APPARATUS ADAPTED FOR MANUFACTURE  
 OR TREATMENT OF SEMICONDUCTOR OR SOLID-STATE  
 DEVICES OR OF PARTS THEREOF (EPO)  
 257/E21.002 .Manufacture or treatment of semiconductor  
 device (EPO)  
 257/E21.04 ..Device having at least one potential-jump  
 depletion barrier or surface barrier, e.g., PN junction,  
 layer, carrier concentration layer (EPO)  
 257/E21.085 ...Device having semiconductor body comprising  
 without Group IV elements or Group III-V compounds with or  
 impurities, e.g., doping materials (EPO)  
 257/E21.211 ....Treatment of semiconductor body using  
 material on process other than deposition of semiconductor  
 material, or a substrate, diffusion or alloying of impurity  
 radiation treatment (EPO)  
 257/E21.214 .....To change their surface-physical  
 cutting characteristics or shape, e.g., etching, polishing,  
 (EPO)  
 257/E21.294 .....Deposition/post-treatment of  
 layers on noninsulating, e.g., conductive - or resistive -  
 insulating layers (EPO)  
 257/E21.3 .....Post treatment (EPO)  
 257/E21.305 .....Physical or chemical etching of layer;  
 e.g., to produce a patterned layer from pre-deposited  
 extensive layer (EPO)  
 257/E21.314 .....Using mask (EPO)
- 2 257/E51.017 (0 OR, 2 XR)  
 Class 257 : ACTIVE SOLID-STATE DEVICES  
 257/E51.001 ORGANIC SOLID STATE DEVICES, PROCESSES OR  
 APPARATUS PECULIAR TO MANUFACTURE OR TREATMENT OF SUCH  
 DEVICES OR OF PARTS THEREOF  
 257/E51.002 .Structural detail of device (EPO)  
 257/E51.012 ..Radiation-sensitive organic solid-state  
 device (EPO)  
 257/E51.017 ...Comprising organic semiconductor-organic  
 semiconductor heterojunction (EPO)
- 2 313/479 (2 OR, 0 XR)  
 Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
 313/364 CATHODE RAY TUBE  
 313/477R .Envelope  
 313/479 ..Coating or shielding
- 2 313/512 (1 OR, 1 XR)  
 Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
 313/483 WITH LUMINESCENT SOLID OR LIQUID MATERIAL  
 313/498 .Solid-state type  
 313/512 ..with envelope or encapsulation
- 2 315/169.3 (2 OR, 0 XR)  
 Class 315 : ELECTRIC LAMP AND DISCHARGE DEVICES: SYSTEMS

- 315/160 PLURAL POWER SUPPLIES
- 315/167 .Plural cathode and/or anode load device
- 315/169.1 ..Diverse-type energizing or bias supplies to  
different electrodes
- 315/169.3 ...Electroluminescent device
- 2 359/270 (1 OR, 1 XR)
- Class 359 : OPTICS: SYSTEMS
- 359/237 OPTICAL MODULATOR
- 359/238 .Light wave temporal modulation (e.g.,  
frequency, amplitude, etc.)
- 359/240 ..Changing bulk optical parameter
- 359/245 ...Electro-optic
- 359/265 ....Electrochromic
- 359/267 .....Reflection-type (e.g., display device)
- 359/270 .....Particular electrolyte layer
- 2 428/209 (1 OR, 1 XR)
- Class 428 : STOCK MATERIAL OR MISCELLANEOUS ARTICLES
- 428/98 STRUCTURALLY DEFINED WEB OR SHEET (E.G.,  
OVERALL DIMENSION, ETC.)
- 428/195.1 .Discontinuous or differential coating,  
impregnation or bond (e.g., artwork, printing, retouched  
photograph, etc.)
- 428/209 ..Including metal layer
- 2 438/701 (2 OR, 0 XR)
- Class 438 : SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS
- 438/689 CHEMICAL ETCHING
- 438/694 .Combined with coating step
- 438/700 ..Formation of groove or trench
- 438/701 ...Tapered configuration
- 2 438/82 (0 OR, 2 XR)
- Class 438 : SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS
- 438/51 ..Packaging (e.g., with mounting,  
encapsulating, etc.) or treatment of packaged  
semiconductor
- 438/57 .Responsive to electromagnetic radiation
- 438/82 ..Having organic semiconductor component
- 2 445/24 (0 OR, 2 XR)
- Class 445 : ELECTRIC LAMP OR SPACE DISCHARGE COMPONENT OR  
DEVICE MANUFACTURING
- 445/1 PROCESS
- 445/23 .With assembly or disassembly
- 445/24 ..Display or gas panel making
- 2 528/377 (0 OR, 2 XR)
- Class 528 : SYNTHETIC RESINS OR NATURAL RUBBERS -- PART  
OF THE CLASS 520 SERIES
- 528/373 .FROM SULFUR-CONTAINING REACTANT
- 528/377 ..From heterocyclic compound containing a  
sulfur atom as a ring member



## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S52	2	"6333145".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:02
S53	8043	alkylenedioxythiophene or polythiophene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27
S54	276	S53 and (polyphosphoric or cyclohexadiene or polyhydroxy or thiaalkanedicarboxylic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:24
S55	77	S53 same (polyphosphoric or cyclohexadiene or polyhydroxy or thiaalkanedicarboxylic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:03
S56	65	S55 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:11
S57	57	S56 and polyanion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12
S58	3	S57 and (dihydro near thieno)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:05
S59	157	S54 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12

## EAST Search History

S60	78	S59 and polyanion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12
S61	78	S60 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:13
S62	18	S61 and (oxy near alkylene near oxy)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:19
S63	18	S62 and (tetronic or dihydroxybenzene or sulpho or sulphonate)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:20
S64	13	S55 and (oxy near alkylene near oxy)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:19
S65	13	S64 and (tetronic or dihydroxybenzene or sulpho or sulphonate)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:20
S66	135	S53 and (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:25
S67	14	S53 same (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27

## EAST Search History

S68	192	alkylenedioxythiophene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27
S69	6	S68 same (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	"6333145".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:02
L2	8043	alkylenedioxythiophene or polythiophene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27
L3	276	L2 and (polyphosphoric or cyclohexadiene or polyhydroxy or thiaalkanedicarboxylic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:24
L4	77	L2 same (polyphosphoric or cyclohexadiene or polyhydroxy or thiaalkanedicarboxylic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:03
L5	65	L4 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:11
L6	57	L5 and polyanion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12
L7	3	L6 and (dihydro near thieno)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:05
L8	157	L3 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12

## EAST Search History

L9	78	L8 and polyanion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:12
L10	78	L9 and ((layer near configuration) or (light near emitting) or photovoltaic or (solar near cell) or transistor or electroluminescent)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:13
L11	18	L10 and (oxy near alkylene near oxy)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:19
L12	18	L11 and (tetronic or dihydroxybenzene or sulpho or sulphonate)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:20
L13	13	L4 and (oxy near alkylene near oxy)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:19
L14	13	L13 and (tetronic or dihydroxybenzene or sulpho or sulphonate)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:20
L15	135	L2 and (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:25
L16	14	L2 same (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27

## EAST Search History

L17	192	alkylenedioxythiophene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27
L18	6	L17 same (polyphosphoric or thiaalkanedicarboxylic or cyclohexadiene)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/01/27 11:27